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10/050,750	01/16/2002	Wai William Wang	39524.1000	7722

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EXAMINER

PATEL, GAUTAM

ART UNIT

PAPER NUMBER

2655

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/050,750	Applicant(s) WANG ET AL.	
	Examiner Gautam R. Patel	Art Unit 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This is in response to amendment filed on 5-16-05.
2. Claims 1-5 and 7 remain for examination.
Applicants are urged to cancel non-elected claim 6.

Claim Rejections - 35 U.S.C. § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 4 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bletscher, Jr. et al., US. Patent 5,070,495 (hereafter Bletscher).

As to claim 1, Bletscher discloses the invention as claimed, an optical power calibration method [see Figs. 1-8, especially 4 and 6] including providing data to be written, determining a writing location of the data, and performing an optical power calibration process, comprising the steps of:

providing data to be written on the data storage area [col. 4, lines 17-42; col. 5, lines 58-61];

determining a writing location [locations such as innermost or outmost] of the data on the data storage area [col. 8, lines 1-8; col. 5, lines 58-61];

performing an optical power calibration process in the first power calibration area [innermost tracks; see fig. 4] when the writing location being within a predetermined portion of the data storage area; and

performing an optical power calibration process in the second power calibration area [outermost tracks; see fig. 4] when the writing location being out of the predetermined portion [col. 8, lines 45-60].

NOTE: On a recording medium data is inherently provided on the data storage area. Where else would one write the data otherwise?

4. The aforementioned claim 2, recites the following steps, inter alia, disclosed in Bletscher:

data storage area is divided into an inner area [fig. 4, area110] and an outer area [fig. 4, area 114], and the predetermined portion is the inner area, when the writing location is located within the inner area, performing the optical power calibration process in the first power calibration area, and when the writing location is located in the outer area, performing the optical power calibration process in the second power calibration area [col. 10, lines 15-34 and col. 10, line 55 to col. 11, line 14].

5. The aforementioned claim 4, recites the following steps, inter alia, disclosed in Bletscher:

the carrier player controls rotation of the optical storage carrier in a constant angular velocity (CAV) [constant rotational speed] manner [col. 8, lines 9-26].

Claim Rejections - 35 U.S.C. § 103

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bletscher as applied to claims 1-2 above in view of Suga et al., US. patent 6,418,102 (hereafter Suga).

As to claim 3, Bletscher discloses all of the above elements, including a multiple power calibration locations at a constant rotational speed or CAV. Bletscher does not specifically disclose that the speed can also be controlled in a linear velocity (CLV) manner to the extent claimed.

However, controlling speed in CAV and CLV manner has been known in the art for a very long time. Also Suga clearly discloses:

the carrier player controls rotation of the optical storage carrier in a constant linear velocity (CLV) manner [Fig. 6B and col. 8, line 53 to col. 9, line 20].

Both Bletscher and Suga are interested in improving the laser power calibration method in an optical disk device. Both show different area for power calibration.

One of ordinary skill in the art at the time of invention would have realized that the in recent years, there has been a clear trend for a faster transmission than the standard transmission rate with respect not only to playback of an optical disk but also to recording and faster more accurate recording will be a good feature to have in the system of Bletscher.

Therefore, it would have been obvious to have also used a CLV manner of speed control [along with CAV manner] in the system of Bletscher as taught by Suga because one would be motivated to record data even at the CLV manner of speed control and make system faster and more accurate for CLV formatted disks, thus increasing the versatility of system [col. 1, lines 58-63 and col. 2, lines 4-12; Suga].

7. The aforementioned claim 5, recites the following steps, inter alia, disclosed in Suga:

the data storage area comprises two data segments, and the carrier player controls rotation of the optical storage carrier in a constant linear velocity (CLV) manner when the access device writing data onto one data segment, and each data segment having a different linear velocity [Fig. 6A and 6B and col. 8, line 53 to col. 9, line 20 and col. 1, lines 36-63].

8. Claim 7 is are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bletscher as applied to claims 1-2 above, and further in view of Ikeda et al., US. patent 6,067,284 (hereafter Ikeda).

As to claim 7, Bletscher discloses all of the above elements, including a multiple power calibration locations at a constant rotational speed, including

location of 114, which is close to outer edge. Bletscher does not specifically disclose that the location is last possible lead-out area to the extent claimed.

However, locating PCA in the lead-in is well known [as shown by Bletscher] and also based on the Orange Book standard has been known in the art for a very long time.

Also Ikeda clearly discloses:

the optical storage carrier further comprises a last possible lead-out area located close to the outer edge [fig. 17, area 238] of the optical storage carrier for storing ending information about data written on the optical storage carrier, and the second power calibration area is located within the last possible lead-out area [col. 18, lines 4-26 and Figs. 17 to 18B].

Both Bletscher and Ikeda are interested in improving the laser power calibration method in an optical disk device. Both show different area for power calibration.

One of ordinary skill in the art at the time of invention would have realized that different locations on the disk require different speeds and calibrating power with respect to location will be a good feature to have in the system of Bletscher.

Therefore, it would have been obvious to have also used a lead-out area of power calibration in the system of Bletscher as taught by Ikeda because one would be motivated to calibrate the data which is location specific and thus improve accuracy of recording and hence playback in the system, especially high density recording environment of modern system.

Bletscher and Suga were cited as prior art references in previous paper.

9. Applicant's arguments filed on 5-16-05 have been fully considered but they are not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "determining a writing location of the data in the data storage area; performing an optical power calibration process in the first power calibration area when the writing location being within a predetermined portion of the data storage area; and performing an optical power calibration process in the second power calibration area when the writing location being out of the predetermined portion. Clearly, these limitations are nowhere to be found in the Bletscher reference."
[page 5, paragraph 3; REMARKS].

FIRST: It seems the Applicants are making blanket statement to the fact Bletscher meets none of the limitations.

SECOND: It is very that ALL the limitations are met by Bletscher including newly added limitation of "of the data storage area". First Bletscher patent is about write calibration of magneto-optic disk recorders, which is what the Applicants are doing. Second in figure 4 Bletscher clearly discloses [as also admitted by Applicants in second paragraph on page 6 of remarks] discloses innermost and outermost tracks [hence first and second location of power calibration AND data area]. And exact location of these areas being controlled by RAM 42 [col. 6, lines 3-10].

B)That; "However, binary data pattern 12, which is a test pattern used for independently and sequentially adjusting power level duration of the pulses for

enabling symmetry in the record signal pattern 12 on the optical disk (col. 5, lines 16-19), fails to teach the data to be written on the data storage area" in the Applicant's invention." [page 8, paragraph 1; REMARKS].

FIRST: The lines quoted by the Applicant's refer to power calibration area only so naturally it does not talk about data writing.

SECOND: As it has been pointed out that data writing is inherently present on ANY disk otherwise the disk is useless and there is no reason for doing power calibration in the first place. The reason for power calibration is to determine what area requires what kind of power for optimum writing and use that power to write data in that particular area. Also Bletscher very clearly indicates "The radial motion of carriage 34 enables access to any one of plurality of concentric tracks or circumvolutions of spiral track for recording and recovering data on and from the disk." [col. 5, lines 56-61; Bletscher].

C) That: "Therefore Bletscher, performing iteratively calibrations at different tracks, fails to teach the optical power calibration method in accordance with the present invention for performing an optical power calibration process in either the inner power calibration area or the outer power calibration area according to the writing location of the data." [page 8, paragraph 3; REMARKS].

See summary of the invention on page 4, lines 18-42. It very clearly stated here that outermost [outer power calibration area] and innermost tracks [inner power calibration area] are being used for power calibration AND data storage [col. 5, lines 58-61].

NOTE: In light of the translation being provided the Seong rejection is moot and hence withdrawn.

10. **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 703-872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Wayne Young can be reached on (571) 272-7582.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

A handwritten signature in black ink, appearing to read "Gautam R. Patel", with a long horizontal stroke extending to the right.

**GAUTAM R. PATEL
PRIMARY EXAMINER**

Gautam R. Patel
Primary Examiner
Group Art Unit 2655

July 3, 2005